

## THE SHIPBUILDERS OF HUMBOLDT BAY (PART ONE)

One of the most nearly inaccessible points on the coast of California, and therefore one of the last to be settled by white men, Humboldt Bay nevertheless became one of the early centers of wooden shipbuilding on the West Coast. Until after World War I, its shipyards turned out a steady series of wooden craft that ranked with the finest built anywhere on the Pacific Coast.

As a principal gateway to the redwood country, the Bay attracted a thriving commerce; the ships that called there supported a marine repair industry which attracted shipwrights; and, having an abundant local supply of Douglas fir, the shipyards soon began to undertake new construction as well as repair work. Many master builders, after a stay in Eureka, moved to other ports along the coast. This was particularly true when the Olympic Peninsula of Washington was opened to lumbering in the late nineties, and several Humboldt Bay shipbuilders transferred operations to Grays Harbor at that time.

The shipbuilding history of Humboldt Bay is therefore inextricably linked with the history of wooden shipbuilding on the Pacific Coast in general. We have been fortunate in obtaining accounts of several builders from their close kin, and in this and succeeding issues of LOG CHIPS we shall tell the history of shipbuilding in Humboldt County from the biographical point of view.

## EUPHRONIUS COUSINS

One of the earliest Humboldt Bay shipbuilders was Euphronius Cousins, who was born in Hancock County, Maine, about 1835. As a young man he operated a shipyard at Ellsworth, Maine, and in 1865 came to Eureka. In partnership with his younger brother Heman Dickerson Cousins, he established a shipyard on land belonging to William Carson. The vessels built by E. & H. Cousins at Eureka are listed in the next column.

Cousins was also interested in lumbering; in partnership with Joseph Russ he built Cousins' Mill on Gunthers Island, and in 1883 sold out to David Evans, who formed the Excelsior Redwood Co. Together with E.J. Dodge and C.H. Heney, Cousins next established the Eel River Valley Lumber Company. During this period he also served as the Eureka agent for Bureau Veritas.

After 10 years at Eel River, Cousins tried his hand at mining in Arizona; but in 1896 he returned to Eureka, and in 1900 he established a shipyard at Aberdeen, on Grays Harbor, in partnership with W.H. Mc

Name	Rig	Tons	Owner
	1865		
OCEAN EXPRESS	Sch	---	---
HESPERIAN	Brig	241	Dolbeer & Carson
	1867		
MAY QUEEN	Sch	123	----
DASHING WAVE	Sch	148	----
WESTERN BELLE	Bktn	275	----
	1868		
LAURA MAY	Sch	127	H. Winkelman*
NAUTILUS	Brig	173	Matthew Turner
	1875		
MARY E. RUSS	2mSch	235	----
HUMBOLDT	Stmr	388	W.J. Sweasey*
	1881		
MAGGIE C. RUSS	3mSch	196	----
JOSEPH RUSS	3mSch	247	----
	1882		
RUBY A. COUSINS	2mSch	197	E.J. Dodge*
	1883		
LILLEBONNE	3mSch	218	Melanie Cousins*
			(* part owner)

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Whinney, and he died there on 9 June 1901. Cousins was married in Maine to Sophia Blaisdell; and they had 5 children. In 1880, after her death, he was married in San Francisco to Melanie Lalouette of Lillebonne, France.

Of Cousins' ships, DASHING WAVE was wrecked in the Bering Sea while on a cod-fishing voyage, and WESTERN BELLE was lost with all hands on her maiden voyage. LAURA MAY went ashore in fog near Coos Bay in 1874 and became a total loss. The brig NAUTILUS was built for Captain Turner for his trade with Tahiti. Turner designed the brig himself in accordance with John W. Griffiths' theories of naval architecture, and she proved so successful that he went into shipbuilding on his own account at San Francisco.

The steamer HUMBOLDT, a regular trader to San Francisco, was lost on Point Gorda in September 1895. MAGGIE C. RUSS was wrecked at San Blas, Mexico, in June 1903; while JOSEPH RUSS, which cost \$22,000, was lost on Chirikof Island, Alaska, in May 1912 while fishing cod. RUBY A. COUSINS was lost on Kodiak Island in March 1917 as the HAROLD BLEKUM, and LILLEBONNE capsized in August 1912 while serving as a garbage barge for the city of Oakland, California.

#### WILLIAM H. McWHINNEY

William Herbert McWhinney was born 11 July 1853 at St. Andrews, New Brunswick. At the age of 4 he moved with his parents, Mr. and Mrs. John McWhinney, to Warwig, N. B., and on 2 April 1874 he came to Eureka. He stayed there only a year before moving on to Washington Territory, where he worked for a time for a man named Jameson, logging at various places; and in 1876 he went to Vancouver, B.C., where he remained until 1880.

Then he returned to Eureka, where he engaged in contracting and ship repairing and operated a marine railway. He became an American citizen in 1882. In March 1899 he moved to Grays Harbor with George Hitchings and worked for a year in Hitchings' new yard there.

In 1900 the shipbuilding firm of McWhinney & Cousins was formed, to establish a yard at a site in East Aberdeen between the West & Slade mill and the Wilson Bros. mill. Their first contract was with Pollard & Dodge of San Francisco for a steam schooner. Vessels built by McWhinney & Cousins and later by W.H. McWhinney were:

	1900
CORONADO	StSch 578 Pollard & Dodge
F.M. SLADE	4mSch 737 West & Slade
	1901
ELDORADO	4mSch 381 Sanders & Kirchmann
WATSON A. WEST	4mSch 318 West & Slade
	1902
EDWARD R. WEST	4mSch 335 West & Slade

CORONADO, launched in September 1900, was lost in April 1917. She had caught fire off Eureka, and was taken in tow by the steam schooner HOQUIAM, but foundered off Point Arena. F.M. SLADE got ashore on the Peruvian coast in 1914 on a voyage from Grays Harbor to Supe, Peru; and was floated badly damaged, sold to owners in Callao, and renamed HELVETIA.

ELDORADO was abandoned in June 1913 in 31°S, bound from Astoria to Antofagasta; while WATSON A. WEST was wrecked on San Miguel Island, off California, in February 1923.

EDWARD R. WEST, a sister to ELDORADO, was launched in July 1902. A few days later, on July 26th, the shipyard, which included a large shed under which the vessels were built, was burned to the ground, along with an adjacent block of buildings. The schooner had a narrow escape, and her spars, which were still being worked on ashore, were burned. The WEST had another escape from fire at Sydney, Australia, in December 1918, when much of a copra cargo she was loading was burned; she was finally lost on Fakarava Island in the Tuamotos in May 1922.

In 1904 McWhinney built the stern wheel towboat SKOOKUM, 302 tons, for Burrows & Stockwell. This vessel was later owned on the Columbia River, where she was rebuilt in 1930, and scrapped in 1945.

From 1905 to 1907 he was Sheriff of Chehalis (now Grays Harbor) County. Following this term he retired from public life to attend his own property interests.

In 1908 he built a marine railway for repairing boats and scows in South Aberdeen. His last new construction was:

	1910
HARBOR QUEEN	StrWhl 126 James Wilson
	1912
PETREL	Stm Tug 50 Paulson Lumb. Co.

McWhinney later sold the ways to Chris Enderson of Hoquiam (another former Humboldt Bay shipwright). He died 9 March 1939. His son, Captain Earl McWhinney, a towboat master of Seattle, has furnished much of the information in this account.

## BOOK REVIEWS

## SOME RECENT FOREIGN BOOKS

In contrast to the state of affairs that has prevailed in this country for several years, where, except for Kerchov's "International Maritime Dictionary", no significant works in the field of maritime literature have been published, there has recently been published in foreign countries a wide variety of interesting books on many aspects of the sea and ships.

Readers should not be discouraged by the fact that some of these are in foreign languages. With the aid of a pocket dictionary and a little patience, one can readily acquire sufficient competence in any of the Romance or Nordic languages to read works that deal with a familiar branch of technology. It is much easier to read matter of this nature than novels or the kind of "literature" generally used in academic instruction.

HARDY, A.C., "Sea Food Ships"; with drawings by Lawrence Dunn; 246 pp; index; London; Crosby, Lockwood & Son, 1947; price 12/6 (\$2.50).

By a well-known English writer on shipping topics, this book sometimes gives the impression more of having been compiled from technical journals than of being written from actual observation and experience. None the less, it is a well-written and illustrated account of all types of vessel currently used in sea fishing in civilized lands.

HUGHES, Henry, "Immortal Sails; a Story of a Welsh Port and Some of its Ships"; 240 pp; 32 plates; London; Robert Ross & Co., 1946; price 15s (\$3)

Portmadoc was founded in 1824 by William A. Maddock, and as a shipping point for locally quarried slate soon became a ship-building center. The building of wooden craft ceased in 1878, as it did elsewhere in the British Isles about that time; but it was revived in Portmadoc in 1889 with the development of a characteristic type of three-masted topsail schooner for the Newfoundland trade.

Although "Immortal Sails" leaves a little to be desired in the way of more information on the building and operating of the vessels, it is full of fascinating detail on the order of Runciman's "Collier Brigs". Col. Hughes has also written "Through High-ty Seas", a voyage narrative.

WORCESTER, G.R.G., "Junks and Sampans of the Upper Yangtze", 97 pp, 40 plates; Shanghai; Chinese Maritime Customs, 1940.

"Notes on the Crooked-bow and Crooked-stern Junks of Szechwan", 82 pp, 21 plates, same publishers, 1941.

"The Junks and Sampans of the Yangtze", Vol. I, 28 & 245 pp, 83 plates, 1947.

These three publications of the Chinese Maritime Customs give for the first time in English a comprehensive description of the design, construction, and operation of the many different types commonly lumped together under the single heading "junk". And yet, although many variations are discussed and illustrated, we are given to understand that more volumes are to come, and the surface has only been scratched!

The Chinese inflation has made it possible to obtain these volumes in this country at fairly reasonable figures; and although our copy of one was marked at \$300,000, it cost us less than \$5 US.

LECLERCQ, W.L., "Wind in de Zeilen; het Verhaal van een Reis per Zeilschip van Australië om Kap Hoorn Naar Engeland, in het Jaar 1932"; 363 pp; illustrated; Amsterdam; van Kampen (1948).

First published in 1933, this is an account of a voyage in the Finnish four-masted bark HERZOGIN CECILIE, by a Hollender well known as a nautical historian. The book is well illustrated from photos, and also has deck-, sail-, and rigging-plans and a route chart. An appendix gives a list of Erikson's ships, passages in the Australian grain trade 1921-1932, and an epitome of CECILIE's voyages.

KLEM, Knud "De Danskes Vej; Rids af Dansk Sønistorie"; 248 pp, 168 figs; A.F.Høst, København, 1941.

"The Danes' Way" was produced under German occupation; perhaps because of it. It is a handsomely produced, beautifully illustrated, detailed account of the development of Danish ship types from the Viking longships to contemporary warships and merchant vessels. The author is director of the Kronborg Maritime Museum, and is thoroughly familiar with his field.

Of special interest to LOG CHIP's readers should be the chapter on 19th and 20th Century sailing vessels, which takes up such types as the galiot, galeas, jagt,

## THE TONNAGE OF THE GREAT REPUBLIC

In working on the topic of the largest wooden ships ever built, one encounters two problems in connection with the dimensions and tonnage of GREAT REPUBLIC, built by Donald McKay at East Boston in 1853.

As pointed out by R.C. Anderson in "Mariner's Mirror", 1943, p.182, there is a discrepancy in the tonnage and registered dimensions of this vessel as first built, and as rebuilt after her fire. "Old measurement" at that time considered only beam and length in establishing tonnage; and since in rebuilding she was only cut down a deck, her maximum beam was unaltered (because of her tumble-home), and her length was diminished only by the amount of the rake of stem and stern in the height of the former spar deck. Her tonnage therefore should only have decreased slightly.

However, the pre-fire register gives her 335 x 53 x 38 ft, 4555 tons, and the rebuilt register 302 x 48-4 x 29-2 ft, 3356 tons.

The pamphlet "Description of the... GREAT REPUBLIC...by a sailor" (24 pp, Boston, 1853) actually written by Duncan McLean has a good set of profile and deck plans of the ship, which appear to have been fairly accurately engraved at the scale of 1/96. If this indeed is the case, her maximum beam was about 49'6", and length about 310', and the recorded register dimensions lend themselves to the suspicion that there was some fudging to increase her apparent tonnage, for reasons that can only be guessed at today.

Another thorny problem concerns the "new measurement" tonnage of GREAT REPUBLIC as first built. Her gross tonnage as rebuilt was 2821 new measurement; and thanks to the staff of the National Archives, who looked up her last document the other day, we can break it down as follows:

Under tonnage deck.....	1773.40
Between decks.....	830.60
Enclosures above deck.....	217.06
Thus her underdeck tonnage was 2604.	

According to the McLean pamphlet, GREAT REPUBLIC originally had four deck-houses, one 23 x 16, one 25 x 16 x 6½ high, one 40 x 12, and one 17 x 11½ "of the same height as the others". The sum of the internal volume of these four houses is about 90 tons.

This leaves only the volume of the

space under the spar deck to be determined. McLean's Plate 4 is a plan of the deck under the spar deck, which scales 10,230 square feet in area. With a length of 294 ft on this deck and a beam of 42.4 ft (inside), we get the quite reasonable value of 0.82 for the coefficient of area.

With the tumble-home, the maximum width of the spar deck was less; but the length was greater, and also the outline of the spar deck would be somewhat fuller. The product of length 310 ft, beam 40 ft, and area coefficient 0.85 gives 10,540 as the area of the spar deck. The mean of these two areas times the mean height between decks (7 ft) divided by 100 cubic feet per ton gives 727 as the tonnage under the spar deck.

A good check on this last figure can be had by comparing the tonnage under the third deck, already given as 830. Assuming tumblehome in the midsection to balance flare at the ends, the two volumes would be proportional to the respective tween-deck heights. The height between the second and third decks was 8 ft. Seven-eighths of 830.6 is 727.

The "new measurement" tonnage of the original GREAT REPUBLIC can thus be computed as follows:

Tonnage under third deck.....	2604
Between third and spar decks. 727	
Deckhouses.....	90
Total gross tonnage.....	3421

The last figure is probably accurate to plus or minus 15 tons, and can be compared with ROANOKE's 3539 and WYOMING's 3730.

## THE LARGEST TWO-MASTED SCHOONER

As a follow-up on our notes on large sloops, we have some material on the largest two-masted schooners. KATE WENTWORTH, 300 tons new measurement, 282 old, built at Castine, 1864, was the largest built on the Penobscot. OLIVER AMES, 456 tons new measurement, built at Berkeley, Massachusetts, in 1866, is generally credited with being the largest two-master on the East Coast. However, these three have been overlooked:

ROBERT CALDWELL	446 old 466 new
WALTER RALEIGH	487 "
LANGDON GILMORE	497 "

All three were built in 1856 by C.C. Jerolomon at Belleville, New Jersey, for D.C. Murray of New York and other owners.

## SAILING SHIP NEWS

ALBATROSS, Swed.aux.4m.sch. 23 Sept.arr London on last leg of Pettersson round-the-world oceanographic expedition.

ALBERT LEO SCHLAGETER, Ger.aux.bark. Was allocated as reparations to U.S.Navy, but was transferred to Brazil, renamed GUANABARA, and towed down by a Dutch tug.

AMERIGO VESPUCCI, Ital.aux.ship. 29 Aug. arr Dublin from Fayal.

C.A.THAYER, 3m.sch. 27 Aug.arr off Cape Flattery, 11 d from Unimak Pass, with 210,000 cod; towed to Paulsbo by DOUGLAS of Puget Sound Tug & Barge Co.

CALI, m/s. Originally the barkentine HAWAII, built at Dumbarton, Scotland, in 1900 for Hind, Rolph & Co., San Francisco. More recently the Mexican motor schooner HIDALGO. 9 Jan.1948 left Guayaquil for Santiago, Cuba. 27 Jan.beached at Grand Cayman and abandoned.

CHRISTIAN RADICH, Nor.tr.ship. 9 August left New York for Narvik.

DAR POMORZA, Pol.tr.ship. 5 Aug.left Liverpool; arr Bergen 12th. 22 Aug.left Bergen; arr Gothenburg 26th. 28 Aug. left Gothenburg for Gdynia.

DUQUESNE, Fr.ship. Built in 1901, this vessel is now lying as a hulk in the Basin d'Arcachon, having until recently stored coal for the trollers of the Soc.des Chalutiers d'Arcachon.

EAGLE, USCG tr.bark. 8 June left New London; 20 June arr Pta del Gal, Azores; 23 June left; 29 June made Eddystone. 12 July left London; 21 July arr Santa Cruz, Canary Is; 24 July left; 13 Aug. arr New London. Cruising in New England waters in September.

EFFIE M.MORRISSEY, 2m.sch. 18 Aug left New Bedford for Cape Verde Is.

FREDERICK P.ELKIN, Br.3m.sch. 8 Aug.arr Barbados from Hampton Roads (36 d)

GASPAR, Port.aux.3m.sch., 309 tons, built Figueira da Foz 1918. 16 Sept.abandoned in hurricane 1100 miles off New York; crew rescued by USCGS BIBB and taken to Argentina.

GRACIE S., aux.2m.sch., built at San Francisco 1893 by Union Iron Works for a bar pilot boat. Lately owned by Sterling Hayden ("Sea Breezes" Apr.1948); now bought by Seattle owners to be rigged with bowsprit and topmast for a training ship.

GUAYTECAS, Pan.bark. Left Durban 14 Oct. 1947; arr Rio de Janeiro 1 Jan.1948.

JEANNE D'ARC, Fr.ship built in 1901 as BELEM. Now lying at Arcachon with DUQUESNE.

LAWHILL, Port.4m.bark. 21 Sept.left Durban; arr Lorenzo Marques 23 Sept.

PAMIR, New Z.4m.bk. 18 Aug arr Auckland from Antwerp (108d)

ROSSINANTE, aux.3m.sch. Built in the USA as PRISCILLA ALDEN in 1918, she is listed in current Lloyds as a Soviet research vessel, out of Vladivostok.

THOMAS W.LAWSON, 7m.steel sch. Bowdoin B.Crowminshield, designer of this vessel and hundreds of other sailing ships, died at Marblehead on 12 August.

YXPILA, Finn.4m.sch. 11 Aug arr Helsinki from Hangö; 2 Sept towed into Farosund alack, bound for Gdansk.

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## CURRENT BIBLIOGRAPHY

ANON., "Deep water man", Ships' Bull., pp 25-30, 37-40, July-Aug 1948. Biography of Capt.Hugh Wallace, 1861-.

ANON., "The marine diesel industry", Motorship, pp 34-44, March 1948. History of the marine diesel in the U.S.

BURGESS, R.H., "Work sails turn to play", Chesapeake Skipper, pp 15, 38-39, June 1948 (ill.). Ram EDWIN & MAUD.

BURGESS, R.H., "Sister steamboats of the Bay", Chesapeake Skipper, pp 8, 36-37, May 1948 (ill.) TALBOT and DORCHESTER (1912), now CITY OF N.Y. and R.E.LEE

BURGESS, R.H., "Schooner on the Chesapeake", Chesapeake Skipper, pp 8, 28-31, April 1948 (ill.). History of schooner rig on Chesapeake Bay.

FORBES, A., and EASTMAN, R.H., "Yankee sailing ship cards", State Street Trust Co., Boston, 76 pp, 1948. Color reproductions of Boston sailing cards, 1852-1882.

MODEL SHIPWAYS, "Scale ship model kits and fittings", 20 pp, 476 Main St., Fort Lee, New Jersey, 1948. Their 1949 catalog.

OLIVER, H.G., "Liberated windjammer sold by U.S.Navy", All Hands, p.26, Oct. 1948 (ill.) ALBERT LEO SCHLAGETER.

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## BOOK REVIEWS (continued from p. 27)

and ever, as well as the more familiar ship, brig, schooner, and cutter. For steamship fans, there is a chapter on motorships and steamers, which commences with CALEDONIA, built at Port Glasgow in 1815 and brought to Denmark in 1819.

## BUILDERS OF THE FOUR-MASTERS

Since publishing the first two installments of the list of four-masted schooners built on the East Coast, the third portion of which appears in this issue on page 31, we have had an opportunity to consult early issues of the Record of the American Bureau of Shipping and its predecessor, the American Shipmaster's Association.

The following builders' names can now be added to pages 6 and 17 to 20 of this volume of LOG CHIPS:

William Adams & Son built ELVIRA J. FRENCH, KHLV.

John Agnew & Co. built WILLIAM T. HART, KBMG.

H.M.Bean built KING PHILIP, KDMW; POCAHONTAS, KFBC; CORNELIUS HARGRAVES, KGNF; MILLIE G. BOWNE, KGQH; WILLIAM JOHNSON, KGWB; ALICE HOLBROOK, KHJR; MARJORIE, KHSG; KATHERINE D.PERRY, KJHQ; FANNY ARTHUR, KJTH; R.& T.HARGRAVES, KLCS; MARY MANNING, KMCS; HENRY W.CRAMP, KMRQ; ALMA E.A.HOLMES, KMTR; and ANNA MURRAY, KPFD.

John M.Brooks built HOWARD SMITH, KGCR; HENRY L.PECKHAM, KJRN; and LOUISE H. RANDALL, KLFP.

Brown & McDonald built NIMBUS, KHGF; YOUNG BROTHERS, KHSD; and DANIEL B. FEARING, KJNQ.

Carleton, Norwood & Co. built ROSE E. MURPHY, KRHD, ex-ANNIE.

David Clark built SAVANNAH, KRGS.

Cobb, Butler & Co. built GENEVA, KQGV

E.S.Crosby built FRANK T.STINSON, KTFB; and SARAH C.ROPES, KJVT.

W.C.Crossley built JOHN H.PLATT, KGSW

George E.Currier built J.R.TEEL, KGQC; CLARENCE H.VENNER, KGTV; and MARIA O.TEEL, KHJQ.

Gardiner G.Deering built JOHN S.AMES, KGRQ; and WESLEY M.OLER, KJFV

Dunn & Elliott built ELLA M.WILLEY, KJRL.

Gesner & Marr built W.WALLACE WARD, KFHS.

G.A.Gilchrist built LENA F.DIXON, KHRV; CARRIE A.COOKSON, KJLP; and HENRY B.FISKE, KRGD.

William F.Green & Son built SENATOR SULLIVAN, KHJN.

Eben Haggett built EBENR.HAGGETT, KHVG.

Howard H.Hanscom built NAPOLEON BOUGHTON, KGCF; JAMES G.BEECHER, KGTD; and WILLIAM NEELEY, KHDP.

J.Manchester Haynes built ANDREW ADAMS, KDQH.

Jackson & Sharp built FRANCIS C.YARNALL, JVSD; F.& T.LUPTON, KGBW; MARJORY BROWN, KGHS; JOB H.JACKSON, JR, KGTB; JAMES JUDGE, KGVN; and FLORENCE C.MECHE, KJQV.

N.Porter Kean built HAROLDINE, KOMQ.

Kelley & Spear built MASSASOIT, KGJW; MASSACHUSETTS, KNSH; and GLENWOOD, KHRL.

McDonald & Andrews built ESTELLE PHINNEY, KJSM; and JOHN W.LINNELL, KHWB.

John L.Mills built ARTHUR MCARDLE, KJVC; CHAUNCEY E.BURK, KJWT; and EDWARD J.BERWIND, KLTS.

Charles V.Minott built MEROM, KJTP.

Morris & Mathis built THOMAS A.WARD, KJSW.

B.W.& H.F.Morse built CHARLES E.BALCH, JWGH; AUGUSTUS HUNT, JWSC; C.B.CHURCH, KOSG; T.A.LAMBERT, KDQG; and JOHN F.RANDALL, KJMG.

The New England Shipbuilding Co. built AGNES MANNING, KDGS; SARAH W.LAWRENCE, KDLM; CASSIE F.BRONSON, KDLR; LUCY H. RUSSELL, KDVJ; VIKING, KFCM; GRACIE D. BUCHANAN, KFDM; CALVIN B.ORCUTT, KFDQ; TECUMSEH, KGDM; JOHN PAULL, KGJR; EDITH OLCOTT, KHDQ; GEORGE BAILEY, KHLN; JOHN HOLLAND, KHLW; MARY ADELAIDE RANDALL, KHWT; STELLA B.KAPLAN, KJCF; JENNIE S. BUTLER, KJTB; and LIZZIE H.BRAYTON, KJWP.

E.C.Pendleton built PENDLETON BROTHERS, KPLC.

Percy & Small built CORDELIA E.HAYS, KRCS; and MARGARET WARD, KRVF.

A.R.Reed & Co. built HATTIE P.SIMPSON, KJSF.

William Rogers built BENJAMIN F.POOLE, KDMG; JACOB S.WINSLOW, KGHQ; R.F.PETTIGREW, KGWQ; and ELEAZER W.CLARK, KJBC.

Sawyer Bros. built EDNA M.CHAMPION, KLWM; and HARRY A.BERWIND, KMLG.

T.J.Southard built EDITH L.ALLEN, KHFG.

Leavitt Storer built JAMES W.FITCH, KHDT.

Samuel W.Tilton built WILLIAM M.BIRD, KCTP; BERTIE & MAUD, KDWQ; WILLIAM K. PARK, KGPS; EDITH BERWIND, KGRL; CHARLES M.PATTERSON, KHJP; SAMUEL W.TILTON, KHTN; ABEL E.BABCOCK, KJQT; MATILDA D.BORDA, KJTC; GEORGE TAULANE, KLHR; and WILLIAM J.LIPSETT, KLTH.

N.E.Vinal built JOHN K.SOUTHER, KGBF.

Charles Ward built SAGAMORE, KJLM.

George L.Welt & Co. built ISIAH HART, KDNM.

SUSIE M.PLUMMER, KHPR (page 16), was built by J.A.& G.A.Creighton.

## FOUR-MASTED SCHOONERS BUILT ON THE EAST COAST (Part 3)

Name	Gross Tons	Signal Letters	Year Place built	Builders
1901 (continued)				
KENWOOD	929	KRJQ	Boston, Massachusetts	W. McKie
L. HERBERT TAFT	1492	KRVJ	Thomaston, Maine	Dunn & Elliott
1902				
LIZZIE M. PARSONS	655	KRLG	Bath, Maine	Kelley, Spear & Co.
PERRY SETZER	1392	KRTB	Bridgeport, Conn.	Green Bros.
MARGARET WARD	1074	KRVF	Bath, Maine	Percy & Small
MARTHA E. WALLACE	1103	KRVM	Port Jefferson, N.Y.	Mather & Wood
HARRY T. HAYWARD	1203	KRL	Thomaston, Maine	Washburn Bros.
SAMUEL P. BOWERS	626	KRVM	Bath, Maine	Kelley, Spear & Co.
FRED A. DAVENPORT	746	KSR	Bath, Maine	James W. Hawley
SAMUEL W. HATHAWAY	1038	KSCF	Brewer, Maine	E. & I.K. Stetson
EDGAR W. MURDOCK	1451	KSCG	Rockport, Maine	Carleton, Norwood & Co.
STANLEY H. MINOR	696	KSCJ	Newcastle, Maine	E. Haggett
(rn ALICE L. PENDLETON)				
BRINA P. PENDLETON	933	KSON	Belfast, Maine	F.C. Pendleton
CITY OF GEORGETOWN	599	KSDG	Bath, Maine	William Rogers
ROBERT H. STEVENSON	1290	KSDP	Bath, Maine	New England S.B.Co.
1903				
HOPE SHERWOOD	686	KSTQ	Bath, Maine	New England S.B.Co.
COHASSET	965	KSGP	Bath, Maine	Kelley, Spear & Co.
(rebuilt 1910 as ANNA R. HEIDRITTER)				
FLORENCE M. PENLEY	1154	KSHP	Bath, Maine	Percy & Small
FREDERIC A. DUGGAN	1137	KSLB	Bath, Maine	New England S.B.Co.
GEORGE W. TRUITT	690	KSNP	Bath, Maine	Kelley, Spear & Co.
(rn GEORGE W. ELZEY JR.)				
JOHN B. BEMILLER	1077	KSMQ	Richmond, Maine	E.S. Crosby
FRANK BARNET	853	KSNW	Belfast, Maine	George A. Gilchrist
ELIZABETH T. DOYLE	781	KSQJ	Boston, Mass.	John M. Brooks
PENDLETON BROTHERS	970	KSQW	Belfast, Maine	F.C. Pendleton
ROBERT H. McCURDY	735	KSRG	Rockland, Maine	Cobb, Butler & Co.
ELEANOR F. BARTRAM	1114	KSRJ	East Boothbay, Maine	W. Irving Adams
HORACE A. STONE	1376	KSRW	Brewer, Maine	E. & I.K. Stetson
QUINNEBAUG	598	KSTF	Mystic, Conn.	M.B. McDonald
SALISBURY	597	KSTL	Bath, Maine	Kelley-Spear Co.
HENRY F. KREGER	1250	KSTV	Bath, Maine	E.S. Crosby
HELEN THOMAS	1470	KSTW	Thomaston, Maine	Washburn Bros.
1904				
JAMES B. DRAKE	1153	KSVG	Bath, Maine	New England S.B.Co.
WINFIELD S. SHUSTER	1481	KSVN	Rockport, Maine	Carleton, Norwood & Co.
EDWARD H. COLE	1791	KSWB	Rockland, Maine	Cobb, Butler & Co.
FROTEMAC	1704	KSWD	Bath, Maine	Kelley-Spear Co.
ANTHONY D. NICHOLS	680	KSWJ	Bath, Maine	Kelley-Spear Co.
WILLIAM E. LOWEN JR.	656	KTCS	Bath, Maine	New England S.B.Co.
LOUIS BOSSERT	605	KIDL	Bath, Maine	Kelley-Spear Co.
HELEN E. TAFT	1197	KTFB	Thomaston, Maine	Dunn & Elliot Co.
WILLIAM J. QUILLIN	695	KTFW	Bath, Maine	New England S.B.Co.
DOROTHY BELLE	488	KTV	Leesburg, N.J.	Russell & Compton
AUGUSTUS H. BABCOCK	1589	KTHV	Brewer, Maine	E. & I.K. Stetson
MARGARET THOMAS	1427	KTHG	Thomaston, Maine	Washburn Bros.
ELLEN LITTLE	999	KTHM	Rockland, Maine	Cobb, Butler & Co.
CATHERINE M. MONAHAN	896	KTHD	Mystic, Conn.	M.B. McDonald
MYRTLE TUNNELL	1498	KTHF	Millbridge, Maine	W. Sawyer
(rn FOREST CITY; rebuilt 1916 as CHARLES DUNLAP; later CHARLES E. DUNLAP)				
ADDISON E. DUNLAP	1485	KTHB	Rockport, Maine	Carleton, Norwood & Co.

small owner  
has 1/2 built

small owner  
has 1/2 built

small owner  
has 1/2 built

Name	Gross Tons	Signal Letters	Year Place built	Builders
1904 (continued)				
JUDGE BOYCE	698	KTMD	Bath, Maine	New England S.B.Co.
GEORGE W. TRUITT JR.	779	KTMF	Bath, Maine	Kelley-Spear Co.
CHARLES J. DUMAS	697	KTMG	Milford, Del.	W.C.Abbott
E. STARR JONES	916	KTMH	Thomaston, Maine	Dunn & Elliot Co.
JOHN BOSSERT	601	KTND	Bath, Maine	Kelley-Spear Co.
MARY L. NEWHALL	1310	KTNQ	Bath, Maine	Crosby Navigation Co.
GEORGE F. SCANNELL	590	KTPF	Mystic, Conn.	M.B.McDonald
1905				
ALICE MAY DAVENPORT	1144	KTPC	Bath, Maine	New England S.B.Co.
(rn GENERAL LEON JURADO)				
EVELYN W. HINKLY	698	KTPJ	Bath, Maine	Percy & Small
ORLEANS	751	KTPN	Bath, Maine	Kelley-Spear Co
GOVERNOR POWERS	1962	KTPR	Rockland, Maine	Cobb, Butler & Co.
CAMILLA MAY PAGE	683	KTSV	Bath, Maine	James W. Hawley
AUGUSTA W. SNOW	830	KTSW	Brewer, Maine	E. & I.K.Stetson
CHARLES WHITTEMORE	693	KVBN	Mystic, Conn.	M.B.McDonald
FRANCES HYDE (st.aux)	739	KVBR	Bath, Maine	Kelley-Spear Co.
STILLMAN F. KELLEY	685	KVBQ	Thomaston, Maine	Washburn Bros.
THEOLINE	981	KVCB	Belfast, Maine	G.A.Gilchrist
(rn MONTE BIANCO)				
RUTH B. COBB	620	KVCG	Rockland, Maine	Cobb, Butler & Co
CLARA DAVIS	680	KVCH	Mystic, Conn.	W.J.Baker
TIPTON	594	KVCN	Mystic, Conn.	M.B.McDonald
HERBERT D. MAXWELL	772	KVOT	Bath, Maine	New England S.B.Co.
ROBERT P. MURPHY	697	KVDQ	Bath, Maine	Percy & Small
1906				
HELEN B. CROSBY	1776	KVDT	Bath, Maine	E.S.Crosby
JUDGE PENNEWILL	439	KVDF	Bethel, Del.	J.M.C.Moore
AUBURN	633	KVFR	Phippsburg, Maine	F.S.Bowker
JOHN D. COLWELL	1042	KVLC	Rockland, Maine	Cobb, Butler & Co.
ELISHA ATKINS	1259	KVNT	Bath, Maine	G.G.Deering Co.
(rn ANNA M. RECORD)				
PENDLETON SISTERS	999	KVQC	Belfast, Maine	Pendleton Bros.
(rn ROSTELLAN)				
NORTHLAND (naph.aux.)	2047	KVQT	Rockland, Maine	Cobb, Butler & Co.
JACKSONVILLE	620	KVTG	Jacksonville, Fla.	Southern S.B.Co.
1907				
ALBERT W. ROBINSON	498	KWDQ	Sharptown, Md.	Sharptown Marine Ry.Co.
DEAN E. BROWN	719	KWJM	Rockland, Maine	Cobb, Butler & Co.
VICTORY	569	KWLC	Portland, Maine	William H. Reede
(rn FLORENCE M. BELDING)				
1908				
BERTHA L. DOWNS	716	KWIF	Bath, Maine	Edward W. Hyde
(rn ATLAS)				
WILLIAM R. WILSON	1385	KWMH	Bath, Maine	G.G.Deering Co.
MARY MANSON GRUENER	715	KWPE	Bath, Maine	Edward W. Hyde
HORATIO G. FOSS	846	KWPN	Camden, N.J.	John L.Mills Const.Co.
JESSIE A. BISHOP	754	KWQN	Rockland, Maine	Cobb, Butler & Co.
LEWISTON	814	KWRH	Rockland, Maine	Cobb, Butler & Co.
STANLEY M. SEAMAN	1060	KWSV	Rockland, Maine	Cobb, Butler & Co.
1909				
ESTHER ANN	753	LBOD	Bath, Maine	J.W.Hawley
FLORENCE HOWARD	863	LBGC	Stonington, Conn.	W.J.Baker

Name	Gross Tons	Signal Letters	Year Place built	Builders
MELBOURN P. SMITH	650	LBGJ	1909 (continued) Millbridge, Maine	Sawyer Bros.
MARY L. BAXTER (rn JOHN C. HILDEBRAND)	1036	LBCK	Bath, Maine	G.G. Deering Co.
BARBARA	838	LBGR	Chelsea, Mass.	Richard T. Green Co.
WILLIAM E. BURNHAM	772	LBHD	Rockland, Maine 1910	Cobb, Butler & Co.
ANNA R. HEIDRITTER (COHASSET KSGP rebuilt)	694	LBKG	Sharptown, Md. 1911	Sharptown Marine Ry. Co.
LYDIA McLELLAN BAXTER	1352	LBSE	Bath, Maine	G.G. Deering Co.
MONTROSE W. HOUCK	1104	LCDK	Bath, Maine 1912	G.G. Deering Co.
WILLIAM C. MAY	710	LCKJ	Bath, Maine	Kelley-Spear Co.
DUSTIN G. CRESSY	862	LTMH	Bath, Maine 1915	Percy & Small, Inc.
CARL F. CRESSY	898	LFQJ	Bath, Maine	Percy & Small, Inc.
GEORGE S. SMITH	577	LFNQ	Phippsburg, Maine 1916	F.S. Bowker & Sons
CHARLES D. LOVELAND (rn ESTHER MELLOURNE)	766	LFTR	Bath, Maine	Percy & Small, Inc.
C.C. MENGEL JR.	844	LGFR	Bath, Maine	Percy & Small, Inc.
PERCY R. PYNE 2D (semi-diesel auxiliary, later removed; rn CORNELIUS H. CALLAGHAN)	1337	LGPM	Camden, Maine 1917	Robert L. Bean
ALSACE (oil aux.)	1091	French	Beaumont, Texas	Howland & Nelson
CHARLOTTE A. MAXWELL	668	LGSM	Camden, Maine	Robert L. Bean
RASSAPEAGE	971	LHLP	Brunswick, Georgia	Brunswick Marine Const. Co.
NISSEQUOGUE (rn JEAN)	971	LHCK	Brunswick, Georgia	Brunswick Marine Const. Co.
NANCY HANKS	1162	LHFK	Thomaston, Maine	G.A. Gilchrist
MAUDE M. MOREY	1364	LHGF	Bath, Maine	G.G. Deering Co.
CHARLES M. STRUVEN	632	LHDM	Pocomoke City, Md.	F. Jones Tull
JULIA LOFT	886	LGTC	Noank, Conn.	Palmer Shipbuilding Co.
SAM C. MENGEL	915	LHED	Bath, Maine	Percy & Small, Inc.
THEOLINE	594	LHRJ	Rockland, Maine	Cobb, Butler & Co.
MANUEL CARAGOL	880	LHRW	Noank, Conn.	Groton Iron Works
BLUE PETER	1234	LHSB	Camden, Maine	Robert L. Bean
ALBERT F. PAUL	735	LHWF	Milford, Del.	W.G. Abbott S.B. Co.
CHARLES H. MacDOWELL	1325	LJBN	Jacksonville, Fla.	G.S. Baxter & Co.
JESSIE G. NOYES	1376	LJBS	Thomaston, Maine	Atlantic Coast Co.
ANNIE C. ROSS	791	LJCG	Bath, Maine	Percy & Small, Inc.
PUENELL T. WHITE	751	LJCH	Sharptown, Md.	Alonzo R. Conley
CHASKA	1347	LJCT	Savannah, Georgia	Savannah Eng. & Const. Co.
CITY OF PENSACOLA (auxiliary)	705	LJDF	Orange, Texas	F.H. Swails
WILLIAM TAYLOR	1358	LJDN	Brunswick, Georgia	Brunswick Mar. Const. Corp.
SALLY WREN	863	LJDQ	Savannah, Georgia	Georgia S.B. Co.
ALICE M. KAFKA (rn FRIENDSHIP; 1925 rn ADELAIDE DAY)	686	LJFQ	Phippsburg, Maine	F.S. Bowker & Sons
FLORENCE B. PHILLIPS	671	LJGN	Camden, Maine	Robert L. Bean
LUTHER LITTLE	1234	LJNG	Somerset, Mass.	Read Bros. Co.
JOAN KIELBERG	660	LJNS	Millbridge, Maine	Sawyer Shipyard Corp.
ROSEMARY	901	LJNB	Handsboro, Miss.	Mateo Martinovich
ANNA LAURA McKENNEY	1021	LJND	Boothbay Harbor, Me.	Atlantic Coast Co.

(to be continued)

## SAILING SHIPS LAUNCHED IN THE UNITED KINGDOM, 1889

(Arranged by builders)

Name	Matl.	Rig	Gross	First owners
Later	Year	Later	owners	
VESTA	S.P. Austin & Sons, West Dockyard, Sunderland	Steel Bark	1453	M.G. Amsinck, Hamburg
WYCHWOOD	James Laing, Deptford Yard, Sunderland	Iron Bark	1272	P.H. Gaynor, Sunderland
INCA	W. Pickersgill & Sons, Southwick, Sunderland	Iron Bark	1059	S. Wakeham & Son, Liverpool
BLUEBELL		Steel Bark	846	James Tedford & Co., Belfast
ULIDIA	Richardson, Duck & Co., Stockton Iron Works, Stockton-on-Tees	Iron Ship	2405	J. Porter (P. Iredale & Co. mgrs), Belfast
SCOTTISH MOORS		Iron Ship	2400	W.H. Ross & Co., Liverpool (COMPLETED 1890)
SVALAND				S.O. Stray & Co, Christiansand, Norway
GLADYS	Charles Hill & Sons, Albion Dockyard, Bristol	Steel Bark	985	Builders
SITA		1890	T. Beynon & Co. Lim., Newport	
NELLIE TROOP		Steel Bark	1367	Troop & Son, St. John, New Brunswick
TALCA	R. & J. Evans & Co., Brunswick Dock, Liverpool	Iron Bark	1136	S. Wakeham & Son, Liverpool
DAGNY		1908	Johan Bang, Grimstad, Norway	
HOLYHEAD		Iron 4m. Bk	2336	W. Thomas & Co., Liverpool
SIERRA VENTANA	W. H. Potter & Sons, Queens Dock, Liverpool	Steel Ship	1853	Sierra Shipping Co. Lim., Liverpool
NALAD				Walmsley & Co.
ALCYONE		Iron 4m. Bk	2219	Poyes & Ruyter, Bremen
FALKLAND		Iron 4m. Bk	2804	Macvicar, Marshall & Co., Liverpool
				(Beams steel)
HOLLINWOOD	T. Royden & Sons, Queens Dock, Liverpool	Steel 4m. Shp	2673	Sl. Shp. H. Lim. (Macvicar, Marshall & Co.), L'pool
WINDERMERE	Whitehaven Shipbuilding Co., Whitehaven	Steel 4m. Bk	2833	
LORD ROSEBERY			1890	
REINBEK				Knöhr & Burchard, Hamburg
ALICE A. LEIGH		Steel 4m. Shp	3003	A.A.L. Ship. Co. (James Joyco), Liverpool
REWA				George H. Seales, Wellington, N.Z.
ENGELHORN		Steel 4m. Bk	2461	J.R. de Wolf & Son, Liverpool
WRAY CASTLE	R. Williamson & Son, Workington	Steel Ship	1891	W.C. Sl. Shp. Co. Lim. (J. Chambers & Co.), L'pool.
GARTHWRAY		1918	Marine Nav. Co. of Canada Lim., Liverpool	
ANDELANA		Steel 4m. Shp	2512	A. Sl. Shp. Co. Lim. (E.F. & W. Roberts), Liverpool
ENTERKIN	Robert Duncan & Co., Port Glasgow	Steel Ship	1698	T.C. Guthrie, Glasgow
BRUNEL		Steel Ship	1637	Brunel Shipp. Co. Lim. (Leitch & Muir), Greenock
CRAIGERNE		Steel 4m. Bk	1822	R.R. Paterson, Greenock
DALS WINTON		Steel Ship	1628	T.C. Guthrie & Co., Glasgow

## W. Hamilton &amp; Co., Port Glasgow

KING ROBERT Steel Ship 1705 J.A. Walker & Co., Glasgow  
 GRACE HARWAR Steel Ship 1807 W. Montgomery, London

## John Reid &amp; Co., Port Glasgow

Irex Steel Ship 2348 J.D. Clink, Greenock  
 PURITAN Steel 4m.Bk 2361 Sir R.W. Cameron, Glasgow

## Russell &amp; Co., Port Glasgow

DUNKERQUE Steel 4m.Bk 3152 A.D. Bordes & Fils, Bordeaux  
 PETER RICKMERS Steel 4m.Shp 2958 Rickmers Reismühlen Rhederi & Schiffbau A/G,  
 SIR ROBERT FERNIE Stl 4m.Bk 2528 W.J. Fernie, London Bremerhaven.  
 ELIZABETH 1907 German  
 GLENCAIRD Steel 4m.Bk 2523 Shp. G. Co. Lim. (W.T. Dixon & Sns), Liverpool  
 CAIRNIEHILL Steel 4m.Bk 2524 Shp. C. Co. Lim. (W.T. Dixon & Sns), Liverpool  
 CHARLES R. FLINT 1895 Flint & Co. (New York), Nicaragua  
 DUMFRIESSHIRE Steel 4m.Bk 2565 Thomas Law & Co., Glasgow  
 CRAIGEND Steel 4m.Bk 2272 North British Shipping Co., Glasgow  
 STANLEY Steel 4m.Bk 2210 Shp. S. Co. Lim. (G.M. Steeves), Liverpool  
 PORT DOUGLAS Steel Ship 1662 Crawford & Rowat, Glasgow  
 PORT PATRICK Steel Ship 1666 Crawford & Rowat, Glasgow  
 GLENMARK Steel Bark 1367 Dundee Shipowners, Dundee  
 GLENESK Steel Bark 1369 Dundee Shipowners, Dundee  
 HANTHORN BANK Steel Bark 1309 A. Weir, Glasgow  
 J. H. HUSTEDE Iron Bark 1144 J.H. Hustede, Elsfleth, Germany

## Birrell, Stenhouse &amp; Co., Dumbarton

ELGINSHIRE Steel 4m.Bk 2160 Thomas Law, Glasgow

## Archibald MacMillan &amp; Son, Dockyard, Dumbarton

NEOTSFIELD Iron Ship 1894 F.H. Dangar, Sydney  
 HELGA Steel Ship 1727 Helga Ship Co. Lim. (J.W. Carmichael & Co.), Gl'gw.  
 QUEEN ELIZABETH Steel Ship 1784 Q.E. Ship Co. (J. Black & Co.), Glasgow

## Barclay, Curle &amp; Co., Whiteinch, Glasgow

GLAUCUS Steel 4m.Shp 2056 A. & J.H. Carmichael & Co., Greenock  
 ALMENDRAL A.D. Bordes & Fils, Dunkirk  
 JANET COWAN Steel 4m.Shp 2578 R. Shankland & Co., Greenock  
 BRABLOCH Steel Ship 2062 R.K. Holmes-Kerr (Aitkin, Lilburn & Co. mgr),  
 VINGA Norway Glasgow  
 KELBURN Steel 4m.Shp 2579 D. Shankland, Greenock  
 NORD Steel 4m.Shp 3163 A.D. Bordes & Fils, Dunkirk

## Charles Connell &amp; Co., Whiteinch, Glasgow

ORIENT Steel Ship 1663 A. Evers & Classen, Hamburg  
 OCCIDENT Steel Ship 1663 A. Evers & Classen, Hamburg  
 ARETHUSA Steel Ship 1768 B. Wencke Söhne, Hamburg (COMPLETED 1890)  
 HIPPALOS 1916 Dampskibs Atlanterhavet A/S (E.L. Wessel-mgr), Iquique  
 HAZELBANK Steel Ship 1660 A Weir, Glasgow

## Napier, Shanks &amp; Bell, Yoker, Glasgow

TAMAR Steel Ship 2115 Devitt & Moore, London

## Alexander Stephen &amp; Sons, Linthouse, Glasgow

CARR ROCK Steel Ship 1657 James Cornfoot & Co., Glasgow  
 CARRADALE Steel 4m.Bk 2085 J & A. Roxburgh

A. Hall & Co., Footdee, Aberdeen  
 INVERURIE Steel Bark 1384 George Milne & Co., Aberdeen

Alexander Stephen & Sons, Dundee  
 NEWFIELD Iron frame steel plated Bark 1306 Shp.N.Co.Lim.(Brownells & Co.), L'pool

Grangemouth Dockyard Co., Grangemouth and Alloa  
 BANKHOLME (Alloa) Steel Bark 1229 Bank Shippg.Co.(W.Just & Co.mgr), L'pool  
 SIAM (Grangemouth) Steel Bark 658 A.O.Lindvig, Kragerø, Norway

Charles J. Bigger, Foyle Shipyard, Londonderry  
 COUNTY ANTRIM Steel Bark 1241 R.O.Swyny, Liverpool  
 CAMPHILL Steel Bark 1240 C.Shipp.Co.Lim.(Squarey & Kendall), L'pool  
 LONSDALE Steel Bark 1756 J.H.Iredale & Co., Liverpool  
 OSSEO Steel Bark 1463 B.H.McCorkell, Londonderry  
 Paul Rodgers, Carrickfergus  
 CREEK FISHER Steel 3m.Sch 135 James Fisher & Sons, Barrow

Workman, Clark & Co., Belfast  
 IREDALE Steel Bark 1574 J.Henry Iredale & Co., Liverpool

#### SHIPBUILDING IN 1888 AND 1889

Launchings in United Kingdom yards were still at a depressed rate in 1888, although by 1889 production was at the approximate level of 1886.

The largest vessel built during the biennium was the LIVERPOOL of 3400 gross and 5000 deadweight tons, launched on 7 December 1888 and completed in January 1889. After her, the largest hulls were the HOLKAR, launched 11 February 1888, and the NORD, also rated at 5000 tons deadweight, launched 7 December 1889.

Other noteworthy ships of 1888 were the four-masted schooner TACORA, which was rerigged as a four-masted barkentine after her first voyage; the DUNBOYNE, which had been laid down in 1883 to keep the apprentices and foremen employed at Whitehaven; and the VILLE DE DIEPPE, which is not listed in Lloyd's Register for 1889, but which was a tanker of 1700 tons deadweight, compartmented into 6 tanks with masts stepped on the tank tops.

Ships of 1888 later owned in this country included BUCKINGHAM, which was seized at San Francisco in 1917 as the OTTAWA of the Rederi A/G von 1896, was renamed twice by the Shipping Board and finally bought by her master, Capt.A.C. Wilvers, at Sydney in 1921, only to become a hulk there three years later. Then there was the LORD SHAFTESBURY, which was renamed GOLDEN GATE by Mayor Rolph of San

Francisco, and was scrapped there after his death in 1934; ANDREW WELCH, built for the Planters Line of San Francisco to Honolulu packets; FOONGH SUEY, a Boston-Honolulu trader torpedoed as the GALENA in June 1917; and PASS OF BALMAHA, captured by the Germans in 1916 while taking a cargo of cotton to Archangel under the ownership of the Harriss-Irby Cotton Co.

Among the 1889 launchings should be pointed out the PETER RICKMERS, a four-masted ship with 7 yards on each mast; and DUNKERQUE, another 5000-deadweight tonner, with cellular double bottom and a 1200-ton deep tank amidships.

WINDERMERE, as REINBEK, spent World War I at Santa Rosalia, Mexico, and was bought in 1921 by the Robert Dollar Co. of San Francisco; but they never found a use for her, and she was scrapped in 1928. SIR ROBERT FERNIE, as ELIZABETH, was hulked at Callao in 1909, rerigged at San Francisco in 1917, under Peruvian registry, and was lost in 1924, loading guano. CAIRNIEHILL took fire in New York Harbor in 1895 and was scuttled. Raised, she was refitted as the CHARLES R. FLINT under Nicaraguan registry, only to become a total loss by fire in April 1896.